New H.264 Network Transmitter
Instruction Guide

English Version 1.0

Model :
HEV0118H

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1. Product Description

This manual applies to the Network Transmitter.

The Network Transmitter supports the network service for an existing analog camera. An analog image entered can be monitored on a real-time screen regardless of distances and locations. By using its dedicated program, many users are able to have an access to the Network Transmitter at once or a single user can monitor various network transmitters at the same time. It also enables users to play, store and retrieve a monitoring image by using a PC. All the settings and real-time monitoring screens are also provided through an access to the web.

The Network Transmitter is a one-port video transmitter including two-way audio, fully featured for security surveillance and remote monitoring needs. It is based on the DSP compression chip, and can digitize one analog video source and make it available on the network as real-time, full frame rate Motion JPEG and H.264 (or MPEG-4) video streams.

The Network Transmitter is equipped with RS-485 port for connecting third party PTZ systems. The alarm input and alarm output can be used to connect various third party devices, such as, door sensors and alarm bells.

Installation Steps

Follow these steps to install the Network Transmitter on your local network (LAN):

1. Check the package contents against the list below.
2. Connect the Network Transmitter. See page 4.
3. Set an IP address. See page 4.
4. Set the password. See page 6.

Package Components

The system comes with the following components:

Network Transmitter unit

Installation CD

Installation Guide

Mounting Bracket

Mounting Screws

Contents in the installation CD

1. The Network Transmitter User's Manual
2. The NC-Titanium User's Manual
3. The Smart Manager User's Manual
4. The NC-Titanium Installation software
5. The Smart Manager Installation software

Mounting

The Network Transmitter is supplied with a mounting kit for wall mounting. The mounting bracket can be positioned for mounting the Network Transmitter on a vertical surface.

Overview

• Front Panel

NO	Function	Description
1	USB	One USB port is provided to connect external USB memory stick for archiving video or system upgrade.
2	Reset Button	Press this button to restore the factory default settings
3	Network Indicator	Lights when a remote user is connected to the unit.
4	Power Indicator	Lights when the power is on.

• Rear Panel

NO	Function	Description
1	Power adaptor connector	Connects the supplied power adapter or an external power supply 12V DC or 24V AC, max. 5W.
2	Network connector(PoE)	RJ-45 port compatible with 10/100Mbps, which have a PoE function.
3	8-pin I/O terminal	Connects RS485, alarm input and output.
4	Audio In/Out	Connects the port to the microphone and speaker, which have an amplifier function.
5	Video In/Out	Connects the video input and output.

2. Installation

For the operation of the Network Transmitter, it is necessary to connect a network cable for data transmission, power connection from supplied power adapter and connect a general analog camera. Depending on operation methods, it is possible to connect an alarm cable or audio cable additionally. For its fixation on different locations, please consult with an installer.

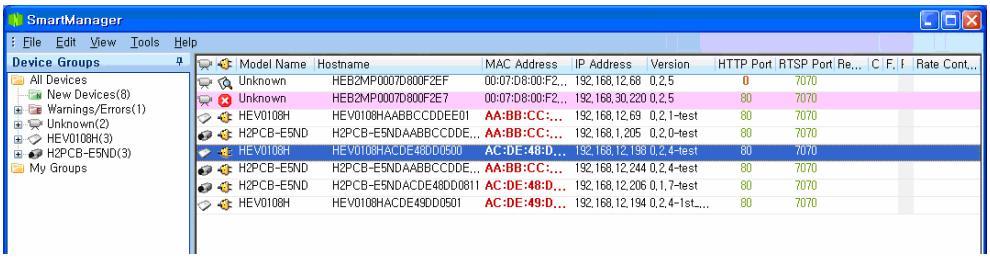
Network Connection

The Network Transmitter supports the operation through the network. Therefore, it is necessary to connect a standard RJ-45 cable to it. Generally a cross-over cable is used for directly connection to PC.

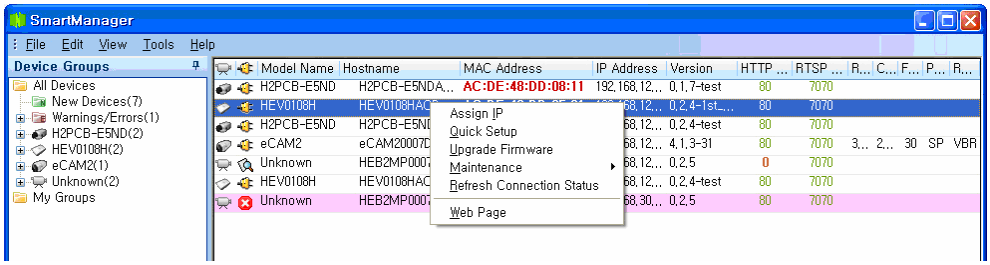
IP Assignment

When the Network Transmitter is first connected to the network it has no IP address. So, it is necessary to allocate an IP address to the device with the “SmartManager” utility on the CD.

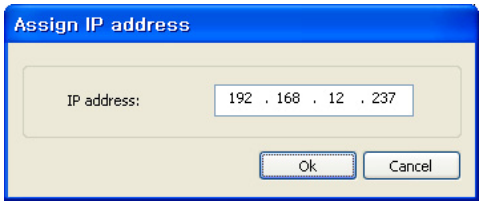
1. Connect the Network Transmitter to the network and power up.
2. Start Smart Manager utility (All Programs > Smart Manager > Smart Manager), the main window will be displayed, after a short while any network devices connected to the network will be displayed in the list.


SmartManager
File Edit View Tools Help
Device Groups
All Devices
New Devices(8)
Warnings/Errors(1)
Unknown(2)
HEV0108H(3)
H2PCB-E5ND(3)
My Groups
Model Name Hostname MAC Address IP Address Version HTTP Port RTSP Port Re... C F. I Rate Cont...
Unknown HEB2MP0007D800F2EF 00:07:D8:00:F2... 192.168.12.68 0.2.5 0 7070
Unknown HEB2MP0007D800F2E7 00:07:D8:00:F2... 192.168.30.220 0.2.5 80 7070
HEV0108H HEV0108HAABBCCDDEE01 AA:BB:CC:... 192.168.12.69 0.2.1-test 80 7070
H2PCB-E5ND H2PCB-E5NDAABBCCDDE... AA:BB:CC:... 192.168.1.205 0.2.0-test 80 7070
HEV0108H HEV0108HACDE48DD0500 AC:DE:48:D... 192.168.12.198 0.2.4-test 80 7070
H2PCB-E5ND H2PCB-E5NDAABBCCDDE... AA:BB:CC:... 192.168.12.244 0.2.4-test 80 7070
H2PCB-E5ND H2PCB-E5NDACDE48DD0811 AC:DE:48:D... 192.168.12.206 0.1.7-test 80 7070
HEV0108H HEV0108HACDE49DD0501 AC:DE:49:D... 192.168.12.194 0.2.4-1st... 80 7070

3. Select the Network Transmitter on the list and click the right button of the mouse. You can see the popup menu as below.



4. Selecting the “Assign IP” in the popup menu displays the following window. Enter a proper IP address and click the OK button.



Note: For more information, refer to the Smart Manger User’s Manual.

3. Operation

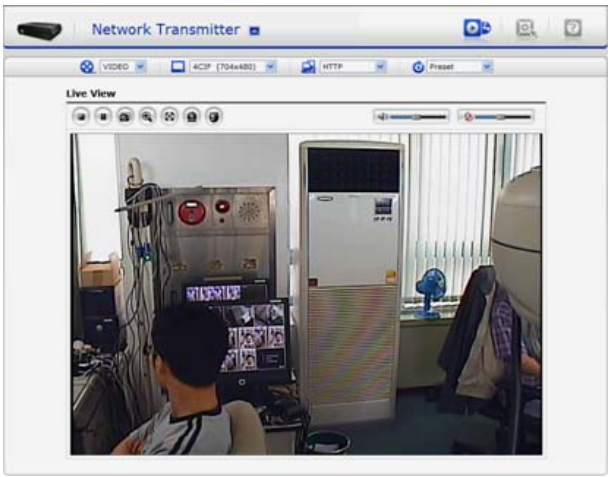
The Network Transmitter can be used with Windows operating system and browsers. The recommended browsers are Internet Explorer, Safari, Firefox and Google Chrome with Windows.

Notes: To view streaming video in Microsoft Internet Explorer, set your browser to allow ActiveX controls.

3.1 Access from a browser

1. Start a browser (Internet Explorer).
2. Enter the IP address or host name of the Network Transmitter in the Location/Address field of your browser.
3. You can see a starting page. Click Live View or Setup to enter web page.

4. The encoder's **Live View** page appears in your browser.



3.2. Access from the internet

Access from the internet Once connected, the Network Transmitter is accessible on your local network (LAN). To access the video encoder from the Internet you must configure your broadband router to allow incoming data traffic to the video encoder. To do this, enable the NAT-traversal feature, which will attempt to automatically configure the router to allow access to the video encoder. This is enabled from Setup>System>Network>NAT.

For more information, please see NAT traversal (port mapping) for IPv4, on page 53, the User's Manual.

3.3 Setting the administrator password

To gain access to the product, the password for the default administrator user must be set. This is done in the "Admin Password" dialog, which is displayed when the network transmitter is accessed for the setup at the first time. Enter your admin name and password, set by the administrator.

Connect to 192.168.12.210
The server 192.168.12.210 at Hitron Systems requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
Password:
Remember my password
OK
Cancel

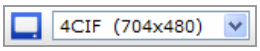
Note: The default administrator username and password is "admin". If the password is lost, the Network Camera must be reset to the factory default settings. See page 9.

3.4 Live View Page

The live view page comes in eight screen modes like 704x480(576), 704x240(288), 352x240(288), 176x120(144), 640x480, 320x240, and 160x120. Users are allowed to select the most suitable one out of those modes. Please, adjust the mode in accordance with your PC specifications and monitoring purposes.

• General controls

The video drop-down list allows you to select a customized or pre-programmed video stream on the live view page.



The resolution drop-down list allows you to select the most suitable one out of video resolutions to be displayed on live view page.

The protocol drop-down list allows you to select which combination of protocols and methods to use depends on your viewing requirements, and on the properties of your network.

The preset drop-down list allows you to select the preset number for the PTZ camera being used. This icon is inactivated if the PTZ settings are not set.

• Control toolbar

The live viewer toolbar is available in Microsoft Internet Explorer only. It displays the following buttons:

The Stop button stops the video stream being played.

The Pause button pause the video stream being played.

The Snapshot button takes a snapshot of the current image.

The Digital Zoom button activates a zoom-in or zoom-out function for video image on the live screen.

The Full Screen button causes the video image to fill the entire screen area. No other windows will be visible. Press the 'Esc' button on the computer keyboard to cancel full screen view.

The Manual Trigger button activates a pop-up window to manually start or stop the event.

The PTZ button activates a pop-up window for Pan, Tilt and Zoom control.

Use this scale to control the volume of the speakers.

Use this scale to control the volume of the microphone.

Use this scale to control the volume of the speakers and microphones.

• Pan/Tilt/Zoom controls

If the Network Transmitter has been appropriately configured, the Live View page displays the controls available for the installed Pan Tilt Zoom (PTZ) device. The administrator can enable/disable the controls for specified users.

For more information, please see “3.6 PTZ Control” on the User’s Manual.

• Video and Audio Streams

The video encoder provides several images and video stream formats. Your requirements and the properties of your network will determine the type you use.

The Live View page in the video encoder provides access to H.264, MPEG-4 and Motion JPEG video streams, and to the list of available video streams. Other applications and clients can also access these video streams/images directly, without going via the Live View page.

3.5 Setup

This section describes how to configure the network transmitter, and is intended for product Administrators**,** who have unrestricted access to all the Setup tools; and Operators, who have access to the settings for Basic, Live View, Video & Image, Audio, Event, and System Configuration.

You can configure the network transmitter by clicking Setup in the top right-hand corner of the Live View page. Click on this page to access the online help that explains the setup tools.

When accessing the Network Transmitter for the first time, the “Admin Password” dialog appears. Enter your admin name and password, set by the administrator.

If the password is lost, the video encoder must be reset to the factory default settings. See “3.8 Resetting to the Factory Default Settings” on the User’s Manual.

Connect to 192.168.12.210
The server 192.168.12.210 at Hitron Systems requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
Password:
Remember my password
OK
Cancel

3.6 Resetting to the factory default settings

To reset the Network Transmitter to the original factory settings, go to the Setup>System >Maintenance web page (described in Maintenance, on page 55, the User's Manual) or use the control button on the network video transmitter, as described below:

Follow the instructions below to reset the Network Transmitter to the factory default settings using the Reset Button.

1. Switch off the Network Transmitter by disconnecting the power adapter.
2. Press and hold the Control Button with a straightened paperclip while reconnecting the power.
3. Keep the Control button pressed until the Power indicator blink.
4. Release the Control Button.
5. When the Power Indicator changes to Green (may take up to 1 minute), the process is complete and the network video transmitter has been reset.
6. The transmitter resets to factory defaults and restarts after completing the factory reset.

CAUTION: When performing a Factory Reset, you will lose any settings you have saved.

3.7 More Information

For more information, please see the Network Transmitter User's Manual, which is available on the CD included in this package.